

MEETING ABSTRACTS

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# AIDS-related Kaposi's sarcoma: outcomes after initiation of highly active antiretroviral therapy under routine conditions in Zimbabwe

Bradley Nelson<sup>1\*</sup>, Margaret Borok<sup>2</sup>, Tariro Makadzange<sup>2</sup>, Tafadzwa Mhlanga<sup>2</sup>, Thomas Campbell<sup>1</sup>

From 12<sup>th</sup> International Conference on Malignancies in AIDS and Other Acquired Immunodeficiencies (ICMAOI)

Bethesda, MD, USA. 26-27 April, 2010

## Background

Additional information on the outcomes of patients with AIDS-related Kaposi's sarcoma (AIDS-KS) on highly active antiretroviral therapy (HAART) in resource-limited settings is needed. This study evaluated outcomes in AIDS-KS patients after initiation of HAART in Zimbabwe.

## Methods

A retrospective cohort of 124 patients from the Parirenyatwa Hospital Kaposi's Sarcoma and Opportunistic Infections (OI) Clinics was studied. 31 patients with AIDS-KS were matched 1:3 to 93 non-KS AIDS patients based on date of initiation of HAART, gender, and age. The primary endpoint was loss to care, defined as failure to attend clinic or refill prescriptions for 3 months or longer. Secondary endpoints were weight gain at 6 months, change in CD4+ count within 1 year, and final CD4+ count within 1 year of initiating HAART. Eligibility criteria included a minimum of 6 months of followup in the OI Clinic and less than 2 months of previous HAART prior to beginning therapy through the OI Clinic. A two-step model-selection strategy using KS status, gender, age, WHO performance status, OI disease burden, medical aid, employment, education, pre-treatment cotrimoxazole use, pre-treatment weight, and pre-treatment CD4+ count was used to identify factors associated with loss to care. On the initial univariate analysis, KS status, medical aid, and pre-treatment cotrimoxazole use had a  $p < 0.15$  and were included in the final multivariate analysis.

## Results

AIDS-KS and non-KS patients did not differ significantly in baseline characteristics except for pre-treatment CD4+ count (196 vs. 92 cells/mm<sup>3</sup>,  $p = 0.005$ ). On the multivariate analysis, KS status ( $p = 0.016$ , HR: 4.11, CI: 1.31-12.92) and having medical aid were significant predictors of loss to care ( $p = 0.048$ , HR: 3.84, CI: 1.02-14.44). At a median followup of 632 days, 37.5% of AIDS-KS patients were lost to care compared to 16.1% of non-KS patients. AIDS-KS patients had significantly worse weight gain than non-KS patients (+0.78% vs. +4.18%,  $p = 0.023$ ). Change in CD4+ count ( $p = 0.149$ ) and final CD4+ count ( $p = 0.729$ ) were not significantly different between study groups. Amongst AIDS-KS patients, retained patients ( $n = 20$ ) had significantly higher pre-treatment CD4+ counts than patients lost to care ( $n = 11$ ) (232 vs. 122 cells/mm<sup>3</sup>,  $p = 0.048$ ).

## Conclusions

After initiating HAART, AIDS-KS patients experienced greater loss to care and poorer weight gain than matched non-KS patients, suggesting that, under routine conditions in Zimbabwe, AIDS-KS patients have worse intermediate- and long-term clinical outcomes than non-KS AIDS patients. AIDS-KS patients retained in care had higher pre-treatment CD4+ counts than patients lost to care, indicating that early intervention with HAART may improve outcomes in AIDS-KS patients.

## Acknowledgements

This article has been published as part of *Infectious Agents and Cancer* Volume 5 Supplement 1, 2010: Proceedings of the 12<sup>th</sup> International Conference on Malignancies in AIDS and Other Acquired

\* Correspondence: [bradley.nelson@ucdenver.edu](mailto:bradley.nelson@ucdenver.edu)

<sup>1</sup>Department of Medicine, University of Colorado, Denver, Aurora, CO, USA  
Full list of author information is available at the end of the article

Immunodeficiencies (ICMAOI). The full contents of the supplement are available online at <http://www.biomedcentral.com/1750-9378/5?issue=S1>.

**Author details**

<sup>1</sup>Department of Medicine, University of Colorado, Denver, Aurora, CO, USA.

<sup>2</sup>Department of Medicine, University of Zimbabwe, Harare, Zimbabwe.

Published: 11 October 2010

doi:10.1186/1750-9378-5-S1-A2

**Cite this article as:** Nelson *et al.*: AIDS-related Kaposi's sarcoma: outcomes after initiation of highly active antiretroviral therapy under routine conditions in Zimbabwe. *Infectious Agents and Cancer* 2010 5(Suppl 1):A2.

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